IN THE SPECIFICATION

[0022] A suitable oxazoline surfactant can be solubilized in an anode-compatible electrolyte and is a liquid or can be liquefied under the anode processing conditions. US Patent No. 3,389,145, incorporated by reference herein as if set forth in its entirety, discloses structures of one suitable set of oxazolines and processes for making same. Also suitable for use in the anode of the invention are substituted oxazoline surfactants having the structures shown in US Patent No. 3,336,145, in US Patent No. 4,536,300, in US Patent No. 5,758,374 and in US Patent No. 5,407,500, each incorporated by reference herein as if set forth in its entirety, and mixtures of any of the foregoing. A most preferred oxazoline surfactant, ethanol,2,2'-[(2-heptadecyl-4(5H)-oxazolydine) bis (methyleneoxy-2,1-ethanedyloxy] bis, has a structure shown as Formula (I-2) in incorporated US Patent No. 5,407,500. This is a compound ~~is~~ commercially available from Angus Chemical (Northbrook, IL) ~~as~~ and sold under the trademark of Alkaterge™ T-IV surfactants.

[0024] The discharge characteristics of 13 size zinc air cells of the present invention containing an Alkaterge™ T-IV surfactant were compared against otherwise identical commercial cells having an organosiliconate surfactant in the anode. Fig. 1 illustrates the discharge curve at 374 Ohm after 1 month storage of cells at 70°F; Fig. 2 shows the discharge curve at 620 Ohm after 20 days storage at 140°F. As shown in Figs. 1 and 2, cells containing oxazoline-type surfactant-based exhibited operating voltage at least 5-10 mV higher than prior art cells during most of their usable lives . In addition, the test cells did not exhibit an initial potential dip and were less sensitive to open circuit rest than otherwise comparable cells containing the organosiliconate type-surfactant.

[0025] Further, Table 1 shows discharge capacity values at 374 Ohm of test cells containing Alkaterge™ T-IV surfactant. The capacity of these cells was comparable to that of organosiliconate type surfactant-based cells before and after storage for one month at 70°F, 50% relative humidity, although discharge capacity before storage was comparatively lower in cells that contained Alkaterge™ T-IV surfactant.

Table 1
Discharge Capacity (mAh) at 1.1 Volt

	Control	Alkaterge™ T-IV Surfactant	Alkaterge™ T Surfactant	Alkaterge™ E Surfactant
No Delay	251	244	247	N/A
One month	252	252	198	N/A

[0026] Additionally, cells containing Alkaterge™ T-IV surfactants and control cells were also stored for twenty days at 140°F, 50% relative humidity and were tested at 620 Ohm for 16 hours/day at 70°F, 50% relative humidity. Results of the two cell types were comparable (258 mAh v. 254 mAh, respectively).